

REMARKS

As Applicants are filing a RCE with this amendment, this amendment and the enclosed information disclosure statement should be entered and considered by the Examiner at this time.

Applicants are amending Claims 2, 8, 15, 20, 25, 29, 33, 37, 43 and 46 herein in order to better claim the present invention. Applicants are also canceling Claim 44.

Applicants will address each of the Examiner's rejections in the order in which they appear in the Final Rejection.

Claim Rejections - 35 USC §103

Claims 1-4, 6-10 and 12-18

In the Final Rejection, the Examiner rejects Claims 1-4, 6-10 and 12-18 under 35 USC §103(a) as being unpatentable over Masuda et al. (US 6,107,983) in view of Shinotsuka et al. (US 6,191,408). This rejection is respectfully traversed.

More specifically, in the Final Rejection, the Examiner admits that Masuda does not disclose that all the semiconductor elements are n-channel type semiconductor elements, as in independent Claims 1, 7 and 13 of the present application. The Examiner, however, cites Shinotsuka and contends that it “discloses a semiconductor fabrication process in which type of transistors used are n-channel MOS transistors (Q1, Q2) (Fig. 2 (Q1, Q2) and col. 4, lines 41-50).” The Examiner then concludes that “it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Masuda's liquid crystal display system shown in Fig. 2 to adapt Shinotsuka's use of n-channel MOS transistors as demonstrated in Fig. 2 because the use of n-channel MOS transistors helps detect and display an image on a display device as taught by Shinotsuka.” Applicants respectfully disagree as this combination of references is improper.

In order to combine references, MPEP §2143.01 states that there must be some teaching, suggestion, or motivation to combine the references. In this case, there is no such teaching, suggestion or motivation to combine these references as Matsuda and Shinotsuka are directed to different products, i.e. a liquid crystal display device (Matsuda) and a photosensor signal processing apparatus (Shinotsuka). One skilled in the art would have no reason or motivation to combine these different products. Hence, the combination of references is improper, and therefore, the rejection based thereon is improper.

Further, Shinotsuka does not disclose or suggest the feature of independent Claim 1 of "wherein *all* semiconductor elements in said pixel portion *and* said driver circuit are n-channel type semiconductor elements" (emphasis added). In the Final Rejection, the Examiner contends that col. 4, lns. 41-50 of Shinotsuka show this feature. However, col. 4, lns. 41-50 is merely directed to a pixel portion of a photosensor signal processing apparatus and discloses a photosensor signal processing apparatus including two n-channel MOS transistors. There is no disclosure or suggestion of the driver circuit or what is used therein, and there is no disclosure of what is used throughout the display portion or driver circuit, as those circuits are not discussed. Hence, at the very least, there is no disclosure or suggestion in Shinotsuka of n-channel semiconductor elements, and especially not all n-channel-type semiconductor element, in the driver circuit, as required in independent Claim 1. Therefore, there is no disclosure or suggestion of the device of Claim 1.

Independent Claim 7 of the present application further recites that the display portion comprises a current control element and that the driver circuit comprises an inverter circuit. Neither Masuda nor Shinotsuka disclose or suggest these claimed features, nor has there been any showing in the Final Rejection as to where these features are disclosed by the cited references.

Dependent Claims 4 and 10 recite that the driver circuit comprises at least one of an EEMOS

circuit and an EDMOS circuit. Shinotsuka does not appear to disclose an EEMOS or an EDMOS, and there has been no showing in the Final Rejection of these elements.

Dependent Claims 2, 8 and 15 recite that the substrate is a plastic substrate. Neither of the cited references discloses or suggests such a substrate, and there has been no showing in the Final Rejection of this element.

With regard to the rejection of Claims 6, 12 and 17-18, the Examiner discusses liquid crystal display devices, but this is not a feature of these claims.

There also appears to be no specific reasons given for the rejection of Claims 14 and 17 or where the claimed features are allegedly disclosed in the references.

Hence, it is respectfully submitted that Claims 1-4, 6-10 and 12-18 are not disclosed or suggested by the cited references, and that the rejection of these claims is improper. Accordingly, it is respectfully requested that this rejection be withdrawn.

Claims 19-21, 23-25, 27-29, 31-33, 35-37, 40-41 and 43-51

The Examiner also rejects Claims 19-21, 23-25, 27-29, 31-33, 35-37, 40-41 and 43-51 under 35 USC §103(a) as being unpatentable over Matsuda in view of Shinotsuka and Lei (US 6,169,391). This rejection is also respectfully traversed.

For at least the reasons discussed above, these claims are also patentable over the cited references and that the rejection of these claims is improper.

Further, Lei is directed to conversion of voltage, which is different from a liquid crystal display device (Masuda) or a photosensor signal processing apparatus (Shinotsuka). Hence, there is no reason or motivation for one skilled in the art to combine Lei with the other cited references, and therefore this combination of references and rejection thereon are improper.

Further, independent Claims 19 and 24 recite the features of a buffer circuit, and first and second semiconductor elements being connected in series. Claims 28 and 32 recite the feature that the driver circuit contains a plurality of flip-flop circuits. The other independent claims recite other specific features. There appears to be no discussion in the Final Rejection as to where these claimed features are disclosed or suggested by the cited references. Hence, the Examiner has failed to make a prima facie case of obviousness, and the rejection of each of these claims should be withdrawn.

Further, Claims 20, 25, 29, 33, 37, 43 recite a plastic substrate while Claims 46-51 recite other specifics. The Final Rejection, however, does not specify where these specific features are allegedly disclosed in the references.

Hence, it is respectfully submitted that Claims 19-21, 23-25, 27-29, 31-33, 35-37, 40-41 and 43-51 are not disclosed or suggested by the cited references, and that the rejection of these claims is improper. Accordingly, it is respectfully requested that this rejection be withdrawn.

New Claims

Applicants are also adding new dependent Claims 52-60. The features of these claims are, for example, shown in Fig. 1 in the switching TFT 201.

As each of these claims is a dependent claim, these claims are allowable for at least the reasons discussed above for the independent claims. Accordingly, it is requested that these claims be entered and allowed.

If any fee should be due for these claims, please charge our deposit account 50/1039.

Information Disclosure Statement

Applicants are filing an information disclosure statement (IDS) herewith. Since a RCE is being filed herewith, it is respectfully requested that this IDS be entered and considered at this time, and prior to the issuance of any further action for this application.

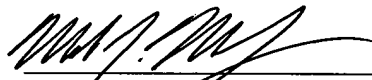
Conclusion

It is respectfully submitted that the present application is in a condition for allowance and should now be allowed.

If any fee is due for this amendment, please charge our deposit account 50/1039.

Favorable reconsideration is earnestly solicited.

Respectfully submitted,



Mark J. Murphy
Registration No. 34,225

COOK, ALEX, McFARRON, MANZO,
CUMMINGS & MEHLER, Ltd.
200 West Adams Street, Suite 2850
Chicago, Illinois 60606
(312) 236-8500

Customer no. 000026568